

CLAIMS

1. A purification process of an amide compound characterized by making an amide compound-containing solution in contact with activated carbon under acidic conditions.
2. A purification process according to claim 1, wherein the amide compound-containing solution is a product solution obtained by a hydration reaction of a corresponding nitrile compound.
3. A purification process according to claim 2, wherein the amide compound has from 2 to 20 carbon atoms.
4. A purification process according to claim 3, wherein the amide compound has an unsaturated bond.
5. A purification process according to claim 2 or 3, wherein the amide compound is produced by a hydration reaction of a nitrile compound by using a microorganism fungus body containing nitrile hydratase or a processed product of the microorganism fungus body.
6. A purification process according to claim 5, wherein the microorganism fungus body is a transformant obtained by expressing a nitrile hydratase gene cloned from the microorganism in an arbitrary host.
7. A purification process according to claim 4, wherein the amide compound is produced by a hydration reaction of a nitrile compound by using a microorganism fungus body containing nitrile

hydratase or a processed product of the microorganism fungus body.

8. A purification process according to claim 7, wherein the microorganism fungus body is a transformant obtained by expressing a nitrile hydratase gene cloned from the microorganism in an arbitrary host.

9. A purification process according to claim 7, wherein the amide compound is acrylamide or methacrylamide.

10. A purification process according to claim 8, wherein the amide compound is acrylamide or methacrylamide.

11. A purification process according to claim 9 or 10, wherein the amide compound-containing solution has pH of from 3.5 to 6.5 upon contacting with the activated carbon.

12. A purification process according to claim 11, characterized in that the amide compound-containing solution is prepared to be acidic by using an organic acid having an acid dissociation exponent of from 3.5 to 5.5 or by using said organic acid and a base.

13. A purification process according to claim 12, wherein the organic acid is acrylic acid or methacrylic acid.

14. A purification process according to claim 13, wherein the activated carbon is activated carbon made from wood or palm shell as a raw material.

15. A purification process according to claim 14, wherein a temperature upon contact with said activated carbon is from

10 to 50°C.

16. A purification process according to claim 15, characterized in that after making said amide compound-containing solution in contact with said activated carbon, a liquid obtained by separating said activated carbon from said amide-containing solution is set at a saturation temperature or lower to deposit crystals.

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